REMARKS

In the non-final Office Action, the Examiner objects to the specification; objects to the

drawings; objects to claims 67-69 because of minor informalities; asserts that claims 46-69 are

not entitled to the benefit of the filing date of Provisional Application No. 60/090,028; rejects

claims 46, 53, and 59 under 35 U.S.C. § 103(a) as unpatentable over PIERSON (U.S. Patent No.

6,487,198) in view of NOH (U.S. Patent No. 6,134,238); rejects claim 47 under 35 U.S.C. §

103(a) as unpatentable over PIERSON in view of NOH, and further in view of KREMER (U.S.

Patent No. 5,278,824); rejects claims 48, 54, and 60 under 35 U.S.C. § 103(a) as unpatentable

over PIERSON in view of NOH, and further in view of VOGEL (U.S. Patent No. 6,075,788);

rejects claims 49-53 and 55-58 under 35 U.S.C. § 103(a) as unpatentable over PIERSON in view

of NOH, and further in view of SCHMIDT (U.S. Patent No. 6,205,154); rejects claim 65 under

35 U.S.C. § 102(e) as anticipated by PIERSON; rejects claim 66 under 35 U.S.C. § 103(a) as

unpatentable over PIERSON in view of KREMER; rejects claims 67-69 under 35 U.S.C. §

103(a) as unpatentable over PIERSON in view of SCHMIDT (U.S. Patent No. 6,205,154);

rejects claims 46, 53, 59, and 65 on the ground of non-statutory obviousness-type double

patenting as unpatentable over claims 1, 3, 5, and 8 of BROMLEY et al. (U.S. Patent No.

6,658,021) in view of JHA (U.S. Patent No. 6,771,663); rejects claim 47 on the ground of non-

statutory obviousness-type double patenting as unpatentable over claims 1, 3, 5, and 8 of

BROMLEY et al. in view of JHA further in view of KREMER; rejects claims 48-51 on the

ground of non-statutory obviousness-type double patenting as unpatentable over claims 1, 3, 5,

and 8 of BROMLEY et al. in view of JHA further in view of SCHMIDT; rejects claim 52 on the

ground of non-statutory obviousness-type double patenting as unpatentable over claims 1, 3, 5,

and 8 of BROMLEY et al. in view of JHA further in view of PIERSON; rejects claims 54-57 on

the ground of non-statutory obviousness-type double patenting as unpatentable over claims 1, 3,

5, and 8 of BROMLEY et al. in view of JHA further in view of SCHMIDT; rejects claim 58 on

the ground of non-statutory obviousness-type double patenting as unpatentable over claims 1, 3,

5, and 8 of BROMLEY et al. in view of JHA further in view of PIERSON; rejects claims 60-63

on the ground of non-statutory obviousness-type double patenting as unpatentable over claims 1,

3, 5, and 8 of BROMLEY et al. in view of JHA further in view of SCHMIDT; rejects claim 64

on the ground of non-statutory obviousness-type double patenting as unpatentable over claims 1,

3, 5, and 8 of BROMLEY et al. in view of JHA further in view of PIERSON; rejects claim 66 on

the ground of non-statutory obviousness-type double patenting as unpatentable over claims 1, 3,

5, and 8 of BROMLEY et al. in view of JHA further in view of KREMER; rejects claims 67-69

on the ground of non-statutory obviousness-type double patenting as unpatentable over claims 1,

3, 5, and 8 of BROMLEY et al. in view of JHA further in view of SCHMIDT. Applicants

respectfully traverse these objections and rejections.

By way of the present Amendment, Applicants propose providing formal drawings.

Applicants further amend claims 67-69 to improve form. No new matter has been added by way

of this Amendment. Claims 46-64 remain pending.

Initially matter

Applicants note that the Examiner does not address claims 61-64 under neither 35 U.S.C.

§ 102(e) nor 35 U.S.C. § 103(a) but rather only on the ground of non-statutory obviousness-type

double patenting. Therefore, Applicants presume that claims 61-64 will be in condition for

immediate allowance with the filing of a terminal disclaimer submitted herewith to overcome the

non-statutory judicially-created doctrine of obviousness-type double patenting rejection.

Objection to the Specification

The specification stands objected to for allegedly containing informalities. Applicants

respectfully traverse this objection.

More particularly, the Examiner alleges:

The examiner objects to the section of the specification in which the status of related
applications are described because the applicant has stated that this application is a
division of Patent 6,658,021 where the applicant has clearly amended the specification to
add new matter which was previously not described in the parent application making this
clearly a Continuation in part.

Applicants disagree.

Applicants submit that the amendment to the specification in the Preliminary Amendment

filed September 17, 2003 ("September 2003 Amendment"), does not add new matter. The

subject matter in the September 2003 Amendment is fully supported by the original disclosure

(of U.S. Patent No. 6,658,021), for example, at p. 9, line 23 to p. 10, line 5, p.11, line 29 to p. 12,

line 14, and Figs. 3 and 7. Accordingly, Applicants respectfully submit that the amendment to

the specification in the September 2003 Amendment does not add new matter, and that the

present application is clearly a division of U.S. Patent No. 6,658,021.

The Examiner further alleges:

The specification is further objected to because the applicant has claimed priority to the
provisional specification again where the applicant has clearly added new matter and
therefore is not entitled to the original priority date.

Applicants disagree.

Applicants submit that that the amendment to the specification in the Preliminary

Amendment filed September 17, 2003 ("September 2003 Amendment"), does not add new

matter. The subject matter in the September 2003 Amendment is fully supported by the

provisional application. For example, page 183 of the provisional application discloses a

channelized SONET data stream including packet over SONET (POS) tributary data streams and

asynchronous transfer mode (ATM) tributary data streams. Accordingly, Applicants respectfully

submit that the amendment to the specification in the September 2003 Amendment does not add

new matter, and that the present application is therefore entitled to the original priority date of

the provisional application (U.S. Patent Application No. 60/090,028).

Accordingly, Applicants respectfully request reconsideration and withdrawal of the

objection of the specification.

Objection to the Drawings

The drawings stands objected to for allegedly not showing every feature of the claimed

invention. Applicants respectfully traverse this objection.

In particular, the Examiner alleges:

Applicant's best drawing relative to this application shows a SONET MUX/DEMUX and Line
card in Fig 4; however, none of the applicant drawings show the following: "channelized
SONET data stream and tributary data streams simultaneously including packet over SONET
tributary data stream and ATM tributary data" as specified in claim 46; "simultaneously
receiving tributary data streams including packer over SONET and ATM tributary streams" and
"combining the simultaneously received tributary data streams into a single SONET data stream"
as specified in claim 53; "means for creating at least ɪNO simultaneous tributary synchronous
optical network data streams including: packet over SONET tributary data stream an ATM
tributary data stream" as specified in claim 59; and "constructing of packer over SONET'
constructing of ATM data stream, and combining the packet over SONET and ATM data stream
into a single channelized SONET data stream" as specified in claim 65.

(Office Action, pp. 25-26). Applicants respectfully disagree.

Applicants direct the Examiner's attention to, for example, Figs. 3 and 7 of the present

application, which disclose the channelized SONET data stream into constituent tributary data

streams, the tributary data streams simultaneously including a packet over SONET (POS)

tributary data stream, and an asynchronous transfer mode (ATM) tributary data stream, as recited

in claim 46, a multiplexer configured to simultaneously receive tributary data streams including a

packet over synchronous optical network (POS) tributary data stream, and an asynchronous

transfer mode (ATM) tributary data stream, as recited in claim 53, means for creating at least two simultaneous tributary synchronous optical network (SONET) data streams, the at least two simultaneous tributary SONET data streams including a packet over synchronous optical network (POS) tributary data stream, and an asynchronous transfer mode (ATM) tributary data stream, as recited in claim 59, and constructing a packet over synchronous optical network (POS) data stream; constructing an asynchronous transfer mode (ATM) data stream; combining the POS data stream and the ATM data stream into a single channelized synchronous optical network (SONET) data stream, as recited in claim 65.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the objection of the drawings.

The drawings are further objected to because they are allegedly not of sufficient quality to be in a published patent.

While not acquiescing in the objection of the drawings, Applicants submit herewith twenty-three (23) pages of formal drawings (Figs. 1-27) for the above-identified application. Applicants respectfully request entry of these formal drawings. Accordingly, Applicants respectfully request reconsideration and withdrawal of the objection of the drawings.

Objection to the Claims

Claims 67-69 stand objected to for allegedly containing informalities.

While not acquiescing in the objection of claims 67-69, but merely to expedite prosecution, Applicants amend claims 67-69 to address the Examiner's concerns. Accordingly, Applicants respectfully request reconsideration and withdrawal of the objection of claims 67-69.

Assertion regarding claim for priority

The Examiner alleges that claims 46-69 are not entitled to the benefit of the filing date of U.S. Provisional Application No. 60/090,028. In particular, the Examiner alleges that the provisional application does not provide support for a link sending or receiving channelized data tributary streams that carry both Packet over SONET and ATM over SONET in tributary streams together simultaneously (Office Action, p. 3). Applicants disagree.

Applicants initially note that claim 46 actually recites the tributary data streams simultaneously including a packet over SONET (POS) tributary data stream, and an asynchronous transfer mode (ATM) tributary data stream, not packet over SONET and ATM over SONET, as alleged by the Examiner. Nevertheless, Applicants again direct the Examiner's attention to, for example, page 183 of U.S. Provisional Application No. 60/090,028, which specifically depicts a channelized SONET/SDH including Packet over SONET tributary streams and ATM over SONET signaling tributary streams. In this regard, Applicants note that, at page 183 of the provisional application, POS refers to packet over SONET. The Examiner continues to ignore this section of the provisional application.

For at least the foregoing reasons, Applicants submit that the Examiner's allegation regarding priority lacks merit. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the assertion that claims 46-69 are not entitled to the benefit of the filing date of U.S. Provisional Application No. 60/090,028.

Rejection under 35 U.S.C. § 103(a) based on PIERSON and NOH

Claims 46, 53, and 59 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over PIERSON and NOH. Applicants respectfully traverse this rejection.

Independent claim 46 is directed to a device comprising a demultiplexer configured to receive a channelized synchronous optical network (SONET) data stream and separate the channelized SONET data stream into constituent tributary data streams, the tributary data streams simultaneously including a packet over SONET (POS) tributary data stream, and an asynchronous transfer mode (ATM) tributary data stream; and a line card coupled to the demultiplexer and configured to provide the demultiplexer with the channelized SONET data stream. PIERSON and NOH, whether taken alone or in any reasonable combination, do not disclose or suggest this combination of features.

For example, PIERSON and NOH, whether taken alone or in any reasonable combination, do not disclose or suggest a demultiplexer to separate the channelized SONET data stream into constituent tributary data streams, the tributary data streams simultaneously including a packet over SONET (POS) tributary data stream, and an asynchronous transfer mode (ATM) tributary data stream. The Examiner admits that PIERSON does not disclose or suggest "separate the channelized synchronous optical data stream into a constituent tributary data stream and configured to provide the demultiplex with the channelized SONET data stream" and relies on col. 5, line 65 to col. 6, line 19, and col. 6, line 63 to col. 7, line 5, of NOH for allegedly disclosing "separate the channelized synchronous optical data stream into a constituent tributary data stream" (non-final Office Action, p. 4). Applicants respectfully disagree with the Examiner's interpretation of NOH.

Initially, Applicants note that claim 46 does not recite "separate the channelized synchronous optical data stream into a constituent tributary data stream" as alleged by the Examiner (non-final Office Action, p. 4). Claim 46 actually recites "separate the channelized SONET data stream into <u>constituent tributary data streams</u>" (emphasis added).

Nevertheless, at col. 5, line 65 to col. 6, line 19, NOH discloses:

> The inevitability of a pure ATM transport option is shown and now described with reference to FIG. 6(a). As shown in FIG. 6(a), the NE 38 carries all ATM and STM traffic as ATM cells in a single SDH (SONET) tributary. STM traffic is circuit emulated (if necessary) into ATM cells to maximize the bandwidth utilization of a given SDH (SONET) pipe by using ATM technologies. The single tributary VC4 indicated as element 53 in the STM-1 pipe is utilized for ATM traffic under ATM management only as indicated as element 50. Switching of ATM traffic will be provided by the ATM Fabric 85. This pure ATM scheme having only ATM cross-connect may be deficient in the respect that pure STM traffic has to be terminated at every node which may introduce greater delay and processing overhead.

> As shown in FIG. 6(b), as ATM traffic demands increase, the transport option in the transport access network will be changed to pure ATM transport with a single SDH (SONET) tributary such as STM-1 and STM-4c, as indicated as element 53. The ATM traffic in the single SDH (SONET) tributary will be terminated at the junction network for grooming at the ATM layer. STM broadband path 52 applications still play an important role as a container for the ATM traffic.

This section of NOH discloses a pure ATM transport option in which an NE 38 carries all ATM and STM traffic as ATM cells in a single SDH (SONET) tributary. This section of NOH does not disclose or suggest separating the channelized synchronous optical data stream into a constituent tributary data stream, as alleged by the Examiner. NOH does not disclose that the NE 38 carries ATM and STM traffic as ATM cells in SDH (SONET) tributaries, as would be required of NOH based on the Examiner's interpretation of claim 46. In stark contrast, NOH specifically discloses a pure ATM transport option in which an NE 38 carries all ATM and STM traffic as ATM cells in a single SDH (SONET) tributary. As such, NOH does not and cannot disclose or suggest separating the ATM and STM traffic as ATM cells in a single SDH (SONET) tributary because there is only one single tributary. Even if, for the sake of argument, this section of NOH did disclose separate the channelized synchronous optical data stream into a constituent tributary data stream, as alleged by the Examiner, a point that Applicants do not concede, this section of NOH does not disclose or suggest separate the channelized SONET data

stream into <u>constituent tributary data streams</u>, let alone a demultiplexer configured to receive a

channelized synchronous optical network (SONET) data stream and separate the channelized

SONET data stream into constituent tributary data streams, <u>the tributary data streams</u>

<u>simultaneously including a packet over SONET (POS) tributary data stream, and an</u>

<u>asynchronous transfer mode (ATM) tributary data stream</u>, as recited in claim 46.

At col. 6, line 63 to col. 7, line 5, NOH discloses:

As shown in FIG. 7(b), by replacing the STM cross-connect system with an ATM VP
cross-connect system 85, the inflexibility issue associated with the boundary of the VC3
tributaries is resolved as customer AB and AC can now share the same VC3 to transport
their ATM traffic.

As ATM traffic demands increase, the transport option in the transport access network
will be changed to pure ATM transport with a single SDH (SONET) path. FIG. 7(c)
shows that bandwidth utilization can be maximized by using a single tributary, e.g., VC4,
with no barrier to surplus capacity.

This section of NOH discloses replacing an STM cross-connect system with an ATM VP cross-

connect to allow customers AB and AC to share VC3 to transport their ATM traffic. This

section of NOH further discloses changing the transport access network to pure ATM transport

using a single tributary. NOH does not disclose or suggest that ATM VP cross-connect receives

a channelized SONET data stream and that the ATM VP cross-connect separates the VC3s into

constituent tributary data streams, as would be required of NOH based on the Examiner's

interpretation of claim 46. Moreover, this section of NOH does not disclose or suggest that the

VC3s include a packet over SONET (POS) tributary data stream, and an asynchronous transfer

mode (ATM) tributary data stream. Accordingly, this section of NOH does not disclose or

suggest a demultiplexer configured to receive a channelized synchronous optical network

(SONET) data stream and separate the channelized SONET data stream into constituent tributary

data streams, the tributary data streams simultaneously including a packet over SONET (POS)

tributary data stream, and an asynchronous transfer mode (ATM) tributary data stream, as recited in claim 46.

For at least the foregoing reasons, Applicants submit that claim 46 is patentable over PIERSON and NOH. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 46 under 35 U.S.C. § 103(a) based on PIERSON and NOH.

Independent claims 53 and 59 recite features similar to (yet possibly of different scope than) features described above with respect to claim 46. Therefore, Applicants submit that claims 53 and 59 are patentable over PIERSON and NOH, whether taken alone or in any reasonable combination, for at least reasons similar to reasons given above with respect to claim 46. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 53 and 59 under 35 U.S.C. § 103(a) based on PIERSON and NOH. Moreover, these claims are patentable over PIERSON and NOH, whether taken alone or in any reasonable combination, for reasons of their own.

For example, claim 53 recites a multiplexer configured to simultaneously receive tributary data streams including a packet over synchronous optical network (POS) tributary data stream, and an asynchronous transfer mode (ATM) tributary data stream, the multiplexer being further configured to combine the simultaneously received tributary data streams into a single channelized synchronous optical network (SONET) data stream. Although the Examiner alleges that PIERSON, at Fig. 6 and col. 12, lines 50-67, discloses "[a] multiplexer configured to simultaneously received a packet over synchronous optical network (POS) data stream and a asynchronous transfer mode data stream," the Examiner admits that PIERSON does not disclose or suggest "combine the simultaneously received data streams into a single channelized synchronous optical network (SONET) data stream" and relies on col. 6, lines 20-62, and col. 5,

line 54 to col. 6, line 19, of NOH for allegedly "disclosing combine the simultaneously received data streams into a single channelized synchronous optical network (SONET) data stream" (non-final Office Action, p. 4). Applicants respectfully disagree with the Examiner's interpretation of PIERSON and NOH.

Fig. 6 of PIERSON depicts a Data Terminating Equipment (DTE) operation in a process of unloading T1 payloads from ATM cells. Fig. 6 of PIERSON does not disclose or suggest that the ATM cells, formed by ATM transmitter 675 and sent to SONET transmitter 685, are transmitted via tributary data streams, let alone that the SONET transmitter 685 receives the formed ATM cells via tributary systems, including a packet over synchronous optical network (POS) tributary data stream, and an asynchronous transfer mode (ATM) tributary data stream, as would be required of PIERSON based on the Examiner's interpretation of claim 53. In fact, Fig. 6 of PIERSON appears to teach away from the above feature of claim 53 by disclosing that the ATM cells are transmitted to the SONET transmitter 685 via one single medium. Accordingly, Fig. 6 of PIERSON does not disclose or suggest a multiplexer configured to simultaneously receive tributary data streams including a packet over synchronous optical network (POS) tributary data stream, and an asynchronous transfer mode (ATM) tributary data stream, the multiplexer being further configured to combine the simultaneously received tributary data streams into a single channelized synchronous optical network (SONET) data stream, as recited in claim 53.

At col. 12, lines 50-67, PIERSON discloses:

ATM transmitter 675 forms outgoing ATM cells by packaging two T1 frames in each ATM cell. As discussed earlier, each ATM cell payload typically carries two T1 payloads, except in fractional T1 link situations. The frame bit for each T1 payload replaces a bit in the ATM cell header. If the T1 frames are in the ESF format, overhead controller 680 may submit an overhead status message to ATM transmitter 675. ATM transmitter 675 inserts the overhead status message in the DL channel of the outgoing

- 19 -

ESF frame bits carried in the ATM cell header. ATM transmitter 675 sends the outgoing ATM cells to SONET transmitter 685.

SONET transmitter 685 forms SONET signal 686 by packaging outgoing ATM cells inside SONET frames. SONET transmitter 685 sends SONET signal 686 to DTE 104 over ATM network 101. Packaging ATM cells in SONET frames and forming SONET signal 686 are well known to those skilled in the art and need not be described in further detail.

This section of PIERSON discloses that an ATM 675 forms outgoing ATM cells, by packaging two T1 frames in each ATM cell, and sends the ATM cells to a SONET transmitter 685.

However this section of PIERSON does not disclose that the ATM cells, formed by ATM transmitter 675 and sent to SONET transmitter 685, are transmitted via tributary data streams, let alone that the SONET transmitter 685 receives the formed ATM cells via tributary systems, including a packet over synchronous optical network (POS) tributary data stream, and an asynchronous transfer mode (ATM) tributary data stream, as would be required of PIERSON based on the Examiner's interpretation of claim 53. Accordingly, this section of PIERSON does not disclose or suggest a multiplexer configured to simultaneously receive tributary data streams including a packet over synchronous optical network (POS) tributary data stream, and an asynchronous transfer mode (ATM) tributary data stream, the multiplexer being further configured to combine the simultaneously received tributary data streams into a single channelized synchronous optical network (SONET) data stream, as recited in claim 53.

Applicants respectfully submit that NOH does not remedy the deficiencies in the disclosure of PIERSON with respect to claim 53. Nevertheless, at col. 6, lines 20-62, NOH discloses:

To illustrate the operations of each layer management, a non-limiting example network model having three ATM Switch (ATM-SW) nodes, is now considered. As illustrated in FIG. 7(a), an STM cross-connect system 30 interconnects the three ATM Switch (ATM-SW) nodes labeled ATM-SW A,B and C for the bandwidth management with, e.g., STM-1 physical links provided between the STM cross-connect system 30 and ATM-SWs. In

the example, the model network accommodates two types of services, e.g., class 1 and class 2 service with no spare capacity being reserved for the network protection. In the example, the class 1 is a video service that is coded at 10 Mb/s with the transport being rate-controlled at 10 Mb/s and the class 2 traffic is 10 Mb/s native LAN traffic. Each service class is assigned to different VPs for the segregation of different QoS requirements. The network management system is located at an administrative center that communicates with the ATM-SWs to collect the data of existing demands, from which the required bandwidth for the forecast demands is calculated as described for instance in the reference entitled "Medium-Term Centralized Virtual-Path Bandwidth Control Based on Traffic Measurements," *IEEE Transactions on Communications*, Vol. 43, No. 10, October 1995 to M. Logothetis, Michael and S. Shioda, the contents and disclosure of which are incorporated by reference as if fully set forth herein.

FIG. 7(a) a shows an initial configuration of this model that provides the capability of the layer 1 management. Customer AB transports three class 1 and three class 2 services between the switch pair A and B and customer AC and BC transport two class 1 and two class 2 services between the switch pair A and C, B and C, respectively. Thus customer AB requires two VC3s. Surplus bandwidth on each VC3 is about 8 Mb/s and 28 Mb/s respectively, since a VC3 provides a customer an available bit rate of 48 Mb/s. The customers BC and AC would require a VC3 with 8 Mb/s surplus bandwidth.

When the forecast traffic demands change, e.g., as customer AB stops subscribing to a class 1 service and the customer AC wishes to transport two more class 2 services, customer AC can not simply use the surplus bandwidth on a VC3 between the ATM-SW A and the STM cross-connect system that handles VC3 cross-connects due to the boundary of the VC3 tributaries. This clearly leads to inefficient bandwidth utilization.

This section of NOH discloses that an STM cross-connect system 30 interconnects the three ATM Switch nodes with STM-1 physical links for bandwidth management. This section does not disclose or suggest that the VC3s are combined into a single channelized SONET data stream, as would be required of NOH based on the Examiner's interpretation of claim 53. In fact, although NOH discloses that three VC3s are connected to STM-1, NOH appears to teach away from this feature by disclosing that three separate outputs proceed from the STM-1, not a single channelized SONET data stream (see, for example, Fig. 7(a)). Moreover, this section of NOH does not disclose or suggest that the STM-1 is a multiplexer or that the outputs proceeding from the STM-1 are synchronous optical network (SONET) data streams. Accordingly, this section of NOH does not disclose or suggest the multiplexer being further configured to combine

the simultaneously received tributary data streams (including a packet over synchronous optical

network (POS) tributary data stream, and an asynchronous transfer mode (ATM) tributary data

stream) into a single channelized synchronous optical network (SONET) data stream, as recited

in claim 53. Additionally, this section of NOH discloses that the configuration of NOH is clearly

inefficient.

At col. 5, line 54 to col. 6, line 19, NOH discloses:

The concatenated mode of SDH (SONET) tributaries such as VC-4-nC provides a
container for ATM traffic. For some applications in ATM networks where the bandwidth
reallocation unit for traffic demand is VC3/VC-4-nC, switching entire VC3/VC-4-nC
ATM containers is more desirable then switching individual ATM cells. The high-speed
transport network with multiple ring interconnections is an example in the ATM/STM
hybrid network. The interconnected ring networks can be dynamically reconfigured by
adding or dropping the entire VC3/VC-4-nC tributaries. SDH (SONET) will be
terminated only when grooming at the ATM layer is needed.

The inevitability of a pure ATM transport option is shown and now described with
reference to FIG. 6(a). As shown in FIG. 6(a), the NE 38 carries all ATM and STM
traffic as ATM cells in a single SDH (SONET) tributary. STM traffic is circuit emulated
(if necessary) into ATM cells to maximize the bandwidth utilization of a given SDH
(SONET) pipe by using ATM technologies. The single tributary VC4 indicated as
element 53 in the STM-1 pipe is utilized for ATM traffic under ATM management only
as indicated as element 50. Switching of ATM traffic will be provided by the ATM
Fabric 85. This pure ATM scheme having only ATM cross-connect may be deficient in
the respect that pure STM traffic has to be terminated at every node which may introduce
greater delay and processing overhead.

As shown in FIG. 6(b), as ATM traffic demands increase, the transport option in the
transport access network will be changed to pure ATM transport with a single SDH
(SONET) tributary such as STM-1 and STM-4c, as indicated as element 53. The ATM
traffic in the single SDH (SONET) tributary will be terminated at the junction network
for grooming at the ATM layer. STM broadband path 52 applications still play an
important role as a container for the ATM traffic.

This section of NOH discloses that a concatenated mode of SDH (SONET) tributaries such as

VC-4-nC provides a container for ATM traffic. With regard to a separate and distinct

embodiment, this section of NOH further discloses a pure ATM transport option in which an NE

38 carries all ATM and STM traffic as ATM cells in a single SDH (SONET) tributary.

However, this section of NOH does not disclose or suggest the multiplexer being further

configured to combine the simultaneously received tributary data streams (a packet over

synchronous optical network (POS) tributary data stream and an asynchronous transfer mode

(ATM) tributary data stream) into a single channelized synchronous optical network (SONET)

data stream, as recited in claim 53. This section of NOH merely discloses a concatenated mode

of SDH (SONET) tributaries but is silent as to whether the concatenated mode includes a

multiplexer. Furthermore, this section of NOH does not disclose or suggest that the tributaries of

the concatenated mode includes a packet over synchronous optical network (POS) tributary data

stream, and an asynchronous transfer mode (ATM) tributary data stream, as would be required of

NOH based on the Examiner's interpretation of claim 53. Moreover, this section of NOH does

not disclose or suggest that the NE 38 carries all ATM and STM traffic as ATM cells SDH

(SONET) tributary data streams.

The Examiner further alleges that NOH discloses that the "three VC3 or tributary streams

which are simultaneously concatenated to create a single STM-1 or SONET single data stream"

(non-final Office Action, p. 4). Applicants respectfully disagree with the Examiner's allegation.

NOH actually refers to VC-4-nC when disclosing a concatenated mode, and not VC3 (see, for

example, col. 5, lines 53-54 of NOH). In this regard, NOH appears to refer to Fig. 7(c) which

depicts three VC4s are connected to an STM1-1, where one VC4 is connected to each STM-1.

Accordingly, the Examiner appears to confuse two different and distinct embodiments of NOH.

Therefore, even if PIERSON were combined with NOH, such a combination could not

fairly be construed to disclose or suggest a multiplexer configured to simultaneously receive

tributary data streams including a packet over synchronous optical network (POS) tributary data

stream, and an asynchronous transfer mode (ATM) tributary data stream, the multiplexer being

further configured to combine the simultaneously received tributary data streams into a single

channelized synchronous optical network (SONET) data stream, as recited in claim 53. Further,

even if for the sake of argument, the combination of PIERSON and NOH could fairly be

construed to disclose each of the features of claim 53, a point that Applicants do not concede,

Applicants assert that the reasons for combining PIERSON and NOH do not satisfy the

requirements of 35 U.S.C. § 103.

     For example, with respect to the reasons for combining PIERSON and NOH, the

Examiner alleges (non-final Office Action, p. 5):

> It would have been obvious to one of ordinary skill in the art at the time of the invention
> to add combine the simultaneously received data streams into a single channelized
> synchronous optical network (SONET) data stream of Noh to the processing of SONET
> transmitter of Pierson because by processing ATM cells with in VC the bandwidth
> utilized in transmitting and receiving the data is more efficiently utilized which will result
> in an improved performance.

Applicants submit that the Examiner's allegation is merely a conclusory statement of an alleged

benefit of the combination. Such conclusory statements have been repeatedly held to be

insufficient for establishing a *prima facie* case of obviousness. In this respect, Applicants rely

upon KSR International Co. v. Teleflex Inc., 550 U.S. 398 (April 30, 2007) (citing In re Kahn,

441 F.3d 977, 988 (Fed. Cir. 2006)), where it was held that rejections on obviousness grounds

cannot be sustained by mere conclusory statements; instead, there must be some articulated

reasoning with some rational underpinning to support the legal conclusion of obviousness.

     Furthermore, the Examiner's allegation does not explain why one skilled in the art would

change the very operation of the DTE of PIERSON to include the system of NOH. NOH

specifically disclose that the configuration (Fig. 7A), relied on by the Examiner for allegedly

disclosing combine the simultaneously received data streams into a single channelized

synchronous optical network (SONET) data stream, is clearly inefficient (col. 6, lines 61-62).

Therefore, one of ordinary skill in the art would not modify the very operation of the DTE of

PIERSON to include the inefficient configuration of NOH. Moreover, the Examiner provides no

explanation as to how such a modified system, if modifiable, would even operate. The

Examiner's allegations fall short of providing the articulated reasoning required by KSR.

Accordingly, the Examiner has not met the initial burden of establishing a *prima facie* case of

obviousness with respect to claim 53.

For at least the foregoing reasons, Applicants submit that claim 53 is patentable over

PIERSON and NOH. Accordingly, Applicants respectfully request that the Examiner reconsider

and withdraw the rejection of claim 53 under 35 U.S.C. § 103(a) based on PIERSON and NOH.

Claim 59 recites means for transmitting the at least two simultaneous tributary SONET

data streams as a single SONET data stream. Although the Examiner alleges that PIERSON, at

Fig. 6 and col. 12, lines 50-67, discloses "means for transmitting a single SONET data stream,"

the Examiner admits that PIERSON does not disclose or suggest "at least two simultaneous

tributary streams in a single SONET data stream" and relies on col. 6, lines 20-62, and col. 5,

line 54 to col. 6, line 19, of NOH for allegedly disclosing "at least two simultaneous tributary

streams in a single SONET data stream" (non-final Office Action, p. 5). Applicants respectfully

disagree with the Examiner's interpretation of PIERSON and NOH.

At the outset, Applicants object to the Examiner's piecemeal attempt at reconstructing

Applicants' claim 59 and submit that such attempt is insufficient for establishing a *prima facie*

case of obviousness with respect to claim 59. Applicants' claim 59 does not recite "means for

transmitting a single SONET data stream" and "at least two simultaneous tributary streams in a

single SONET data stream," as the Examiner alleges. Instead, Applicants' claim 59 specifically

recites means for transmitting the at least two simultaneous tributary SONET data streams as a

single SONET data stream. Instead of addressing this specifically recited feature of claim 59,

the Examiner breaks the feature down into illogical portions and points to a section of PIERSON

for allegedly disclosing several portions, and an unrelated section of NOH for allegedly

disclosing another portion of claim 59. Applicants submit that such attempts at reconstructing

Applicants' claims are clearly impermissible.

In this regard, M.P.E.P. § 2106(II)(C) recites, in relevant part:

> [W]hen evaluating the scope of a claim, every limitation in the claim must
> be considered. USPTO personnel may not dissect a claimed invention into
> discrete elements and then evaluate the elements in isolation. Instead, the
> claim as a whole must be considered. See, e.g., Diamond v. Diehr, 450
> U.S. 175, 188-89, 209 USPQ 1, 9 (1981) ("In determining the eligibility
> of respondents' claimed process for patent protection under § 101, their
> claims must be considered as a whole. It is inappropriate to dissect the
> claims into old and new elements and then to ignore the presence of the
> old elements in the analysis. This is particularly true in a process claim
> because a new combination of steps in a process may be patentable even
> though all the constituents of the combination were well known and in
> common use before the combination was made.").

Here, Applicants respectfully submit that, instead of considering the claim as a whole, the non-

final Office Action has dissected the features of claim 59 into discrete and illogical elements and

evaluated the elements in isolation, which is expressly forbidden by the above-cited section of

the M.P.E.P. Such attempts at reconstructing Applicants' claim are clearly impermissible, as set

forth in the above-cited section of the M.P.E.P. Nevertheless, Applicants respectfully submit

that PIERSON and NOH, whether taken alone or any reasonable combination, do not disclose or

suggest the above feature of claim 59.

At col. 6, lines 20-62, reproduced above, NOH discloses that an STM cross-connect

system 30 interconnects the three ATM Switch nodes with STM-1 physical links STM-1 for

bandwidth management. This section of NOH does not disclose or suggest that the VC3s are

transmitted as a single SONET data stream, or that the VC3s include a packet over synchronous

optical network (POS) tributary data stream and an asynchronous transfer mode (ATM) tributary

data stream, as would be required of NOH based on the Examiner's interpretation of claim 59.

In fact, although NOH discloses that three VC3s are connected to STM-1, NOH appears to teach

away from this feature by disclosing that three separate outputs proceed from the STM-1, not a

single SONET data stream (see, for example, Fig. 7(a)). Moreover, this section of NOH does not

disclose or suggest that the STM-1 is a multiplexer or that the outputs proceeding from the STM-

1 are SONET data streams. Accordingly, this section of NOH does not disclose or suggest

means for transmitting the at least two simultaneous tributary SONET data streams (including a

packet over synchronous optical network (POS) tributary data stream and an asynchronous

transfer mode (ATM) tributary data stream) as a single SONET data stream, as recited in claim

59. Additionally, this section of NOH discloses that this configuration of NOH is clearly

inefficient.

At col. 5, line 54 to col. 6, line 19, NOH discloses that a concatenated mode of SDH

(SONET) tributaries such as VC-4-nC provides a container for ATM traffic. In a separate and

distinct embodiment, this section of NOH further discloses a pure ATM transport option in

which an NE 38 carries all ATM and STM traffic as ATM cells in a single SDH (SONET)

tributary. However, this section of NOH does not disclose or suggest means for transmitting the

at least two simultaneous tributary SONET data streams (including a packet over synchronous

optical network (POS) tributary data stream and an asynchronous transfer mode (ATM) tributary

data stream) as a single SONET data stream, as recited in claim 59. This section of NOH merely

discloses a concatenated mode of SDH (SONET) tributaries but is silent as to whether the

concatenated mode includes means for creating at least two simultaneous tributary SONET data streams. This section of NOH does not disclose or suggest that the tributaries of the concatenated mode includes a packet over synchronous optical network (POS) tributary data stream, and an asynchronous transfer mode (ATM) tributary data stream, as would be required of NOH based on the Examiner's interpretation of claim 59. Moreover, this section of NOH does not disclose or suggest that the NE 38 carries all ATM and STM traffic as ATM cells in more than one SDH (SONET) tributary.

Therefore, even if PIERSON were combined with NOH, such a combination could not fairly be construed to disclose or suggest means for transmitting the at least two simultaneous tributary SONET data streams (including a packet over synchronous optical network (POS) tributary data stream and an asynchronous transfer mode (ATM) tributary data stream) as a single SONET data stream, as recited in claim 59. Further, even if for the sake of argument, the combination of PIERSON and NOH could fairly be construed to disclose each of the features of claim 59, a point that Applicants do not concede, Applicants assert that the reasons for combining PIERSON and NOH do not satisfy the requirements of 35 U.S.C. § 103.

For example, with respect to the reasons for combining PIERSON and NOH, the Examiner alleges (non-final Office Action, p. 5):

> It would have been obvious to one of ordinary skill in the art at the time of the invention to add at least two simultaneous tributary streams of Noh to the processing of SONET transmitter of Pierson because by processing ATM cells with in VC the bandwidth utilized in transmitting and receiving the data is more efficiently utilized which will result in an improved performance. Combining the at least two simultaneous tributary streams in to the SONET transmitter would result in having a means for transmitting at least two simultaneous tributary streams which include both packet over SONET and ATM over SONET and would also result in the transmitting means for transmitting at least two simultaneous tributary SONET data streams in a single SONET data stream.

Applicants submit that the Examiner's allegation is merely a conclusory statement of an alleged

benefit of the combination. Such conclusory statements have been repeatedly held to be

insufficient for establishing a *prima facie* case of obviousness. In this respect, Applicants rely

upon KSR International Co. v. Teleflex Inc., 550 U.S. 398 (April 30, 2007) (citing In re Kahn,

441 F.3d 977, 988 (Fed. Cir. 2006)), where it was held that rejections on obviousness grounds

cannot be sustained by mere conclusory statements; instead, there must be some articulated

reasoning with some rational underpinning to support the legal conclusion of obviousness.

Furthermore, the Examiner's allegation does not explain why one skilled in the art would

change the very operation of the DTE of PIERSON to include the system of NOH. NOH

specifically disclose that the configuration (Fig. 7A), relied on by the Examiner for allegedly

disclosing combine the simultaneously received data streams into a single channelized

synchronous optical network (SONET) data stream, is clearly inefficient (col. 6, lines 61-62).

Therefore, one of ordinary skill in the art would not modify the very operation of the DTE of

PIERSON to include the inefficient configuration of NOH. Moreover, the Examiner provides no

explanation as to how such a modified system would even operate. The Examiner's allegations

fall short of providing the articulated reasoning required by KSR. Accordingly, the Examiner

has not met the initial burden of establishing a *prima facie* case of obviousness with respect to

claim 59.

For at least the foregoing reasons, Applicants submit that claim 59 is patentable over

PIERSON and NOH. Accordingly, Applicants respectfully request that the Examiner reconsider

and withdraw the rejection of claim 59 under 35 U.S.C. § 103(a) based on PIERSON and NOH.

Rejection under 35 U.S.C. § 103(a) based on PIERSON, NOH, and KREMER

Claim 47 stands rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over PIERSON in view of NOH further in view of KREMER. Applicants respectfully traverse this rejection.

Claim 47 depends from claim 46. Without acquiescing in the rejection of claim 46, Applicants submit that the disclosure of KREMER does not remedy the deficiencies in the disclosures of PIERSON and NOH set forth above with respect to claim 46. Claim 47 is, therefore, patentable over PIERSON, NOH, and KREMER, whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 46. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 47 under 35 U.S.C. § 103(a) based on PIERSON, NOH, and KREMER.

Rejection under 35 U.S.C. § 103(a) based on PIERSON, NOH, and VOGEL

Claims 48, 54, and 60 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over PIERSON in view of NOH further in view of VOGEL. Applicants respectfully traverse this rejection.

Claims 48, 54, and 60 depend from claims 46, 53, and 59, respectively. Without acquiescing in the rejection of claims 48, 54, and 60, Applicants submit that the disclosure of VOGEL does not remedy the deficiencies in the disclosures of PIERSON and NOH set forth above with respect to claim 46, 53, and 59. Claims 48, 54, and 60 are, therefore, patentable over PIERSON, NOH, and VOGEL, whether taken alone or in any reasonable combination, for at least the reasons given with regard to claims 46, 53, and 59, respectively. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 48, 54, and 60 under 35 U.S.C. § 103(a) based on PIERSON, NOH, and VOGEL.

Rejection under 35 U.S.C. § 103(a) based on PIERSON, NOH, and SCHMIDT

Claims 49-52 and 55-58 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over PIERSON in view of NOH further in view of SCHMIDT. Applicants respectfully traverse this rejection.

Claims 49-52 and 55-58 depend from claims 46 and 53, respectively. Without acquiescing in the rejection of claims 49-52 and 55-58, Applicants submit that the disclosure of SCHMIDT does not remedy the deficiencies in the disclosures of PIERSON and NOH set forth above with respect to claim 46 and 53. Claims 49-52 and 55-58 are, therefore, patentable over PIERSON, NOH, and SCHMIDT, whether taken alone or in any reasonable combination, for at least the reasons given with regard to claims 46 and 53, respectively. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 49-52 and 55-58 under 35 U.S.C. § 103(a) based on PIERSON, NOH, and SCHMIDT.

Rejection under 35 U.S.C. § 102(e) based on PIERSON

Claim 65 stands rejected under 35 U.S.C. § 102(e) as allegedly anticipated by PIERSON. Applicants respectfully traverse this rejection.

A proper rejection under 35 U.S.C. § 102 requires that a single reference teach every aspect of the claimed invention. Any feature not directly taught must be inherently present. See M.P.E.P. § 2131. PIERSON does not disclose or suggest one or more of the features recited in claim 65.

For example, claim 65 is directed to a method for transmitting information over a fiber optic cable, the method comprising constructing a packet over synchronous optical network (POS) data stream; constructing an asynchronous transfer mode (ATM) data stream; combining the POS data stream and the ATM data stream into a single channelized synchronous optical

network (SONET) data stream; and transmitting the single SONET data stream. PIERSON does not disclose or suggest one or more of the features recited in claim 1.

For example, PIERSON does not disclose or suggest combining the POS data stream and the ATM data stream into a single channelized synchronous optical network (SONET) data stream. Although the Examiner alleges that PIERSON discloses "[c]onstructing a packet over synchronous optical network (POS) data stream," "[c]onstructing an asynchronous transfer mode (ATM) data stream," and "[t]ransmitting the single SONET data stream," the Examiner fails to address the above feature of claim 65 (non-final Office Action, p. 12). Accordingly, Applicants respectfully submit that this rejection of claim 65 is improper, and request, if this rejection is maintained, that the Examiner provide the section(s) of PIERSON allegedly disclosing the above feature of claim 65. Moreover, the Examiner admits that PIERSON does not disclose or suggest "combine the simultaneously received data streams into a single channelized synchronous optical network (SONET) data stream" or "at least two simultaneous tributary streams in a single SONET data stream" (non-final Office Action, pp. 4-5). Accordingly, PIERSON cannot disclose or suggest combining the POS data stream and the ATM data stream into a single channelized synchronous optical network (SONET) data stream, as recited in claim 65.

Since PIERSON does not disclose or suggest combining the POS data stream and the ATM data stream into a single channelized synchronous optical network (SONET) data stream, PIERSON cannot disclose or suggest transmitting the single SONET data stream (which include the combination of the POS data stream and the ATM data stream into a single channelized synchronous optical network (SONET) data stream), as also recited in claim 65.

For at least the foregoing reasons, Applicants submit that claim 65 is not anticipated by PIERSON. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 65 under 35 U.S.C. § 102(e) based on PIERSON.

Rejection under 35 U.S.C. § 103(a) based on PIERSON and KREMER

Claim 66 stands rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over PIERSON in view of KREMER. Applicants respectfully traverse this rejection.

Claim 66 depends from claim 65. Without acquiescing in the rejection of claim 66, Applicants submit that the disclosure of KREMER does not remedy the deficiencies in the disclosure of PIERSON set forth above with respect to claim 65. Claim 66 is, therefore, patentable over PIERSON and KREMER, whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 65. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 66 under 35 U.S.C. § 103(a) based on PIERSON and KREMER.

Rejection under 35 U.S.C. § 103(a) based on PIERSON and SCHMIDT

Claims 67-69 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over PIERSON in view of SCHMIDT. Applicants respectfully traverse this rejection.

Claims 67-69 depend from claim 65. Without acquiescing in the rejection of claims 67-69, Applicants submit that the disclosure of SCHMIDT does not remedy the deficiencies in the disclosure of PIERSON set forth above with respect to claim 65. Claims 67-69 are, therefore, patentable over PIERSON and SCHMIDT, whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 65. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 67-69 under 35 U.S.C. § 103(a) based on PIERSON and SCHMIDT.

Double patenting rejection based on BROMELY et al. and JHA

Claims 46, 53, 59, and 65 stand rejected on the ground of non-statutory obviousness-type

double patenting as allegedly being unpatentable over claims 1, 3, 5 and 8 of BROMLEY et al.

in view of JHA. Applicants respectfully traverse this rejection.

At the outset, Applicants note that JAH is not prior art. JAH is entitled to the benefit of

the filing date of U.S. Provisional Application No. 60/184,264 which is February 23, 2000. As

such, the earliest priority date of JAH is February 23, 2000. In contrast, Applicants' claims 46-

69 are entitled to the benefit of the filing date of U.S. Provisional Application No. 60/090,028,

which is June 19, 1998. Moreover, Applicants note that the present application is a divisional of

U.S. Patent Application No. 09/335,947, filed June 18, 1999, which is prior to JAH's earliest

effective filing date. Accordingly, JAH is not prior art.

While not acquiescing in this rejection, but merely to expedite prosecution, Applicants

submit a terminal disclaimer herewith to overcome the non-statutory judicially-created doctrine

of obviousness-type double patenting rejection.

For at least the foregoing reasons, Applicants respectfully request the reconsideration and

withdrawal of the non-statutory obviousness-type double patenting rejection of claims 46, 53, 59,

and 65 be withdrawn.

Double patenting rejection based on BROMELY et al., JHA, and KREMER

Claim 47 stands rejected on the ground of non-statutory obviousness-type double

patenting as allegedly being unpatentable over claims 1, 3, 5 and 8 of BROMLEY et al. in view

of JHA further in view KREMER. Applicants respectfully traverse this rejection.

At the outset, Applicants note that the fact that the Examiner must look to two separate

references in an attempt to explain why it would have been obvious to incorporate features

missing from claims 1, 3, 5, and 8 of BROMLEY et al. into these claims of BROMLEY et al. is a clear indication of the inappropriateness of this double patenting rejection. Moreover, JAH is not prior art, as indicated above.

While not acquiescing in this rejection, but merely to expedite prosecution, Applicants submit a terminal disclaimer herewith to overcome the non-statutory judicially-created doctrine of obviousness-type double patenting rejection.

For at least the foregoing reasons, Applicants respectfully request the reconsideration and withdrawal of the non-statutory obviousness-type double patenting rejection of claim 47 be withdrawn.

Double patenting rejection based on BROMELY et al., JHA, and SCHMIDT

Claims 48-51 stand rejected on the ground of non-statutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 3, 5 and 8 of BROMLEY et al. in view of JHA further in view SCHMIDT. Applicants respectfully traverse this rejection.

At the outset, Applicants note that the fact that the Examiner must look to two separate references in an attempt to explain why it would have been obvious to incorporate features missing from claims 1, 3, 5, and 8 of BROMLEY et al. into these claims of BROMLEY et al. is a clear indication of the inappropriateness of this double patenting rejection. Moreover, JAH is not prior art, as indicated above.

While not acquiescing in this rejection, but merely to expedite prosecution, Applicants submit a terminal disclaimer herewith to overcome the non-statutory judicially-created doctrine of obviousness-type double patenting rejection.

For at least the foregoing reasons, Applicants respectfully request the reconsideration and withdrawal of the non-statutory obviousness-type double patenting rejection of claims 48-51 be withdrawn.

Double patenting rejection based on BROMELY et al., JHA, and PIERSON

Claim 52 stands rejected on the ground of non-statutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 3, 5 and 8 of BROMLEY et al. in view of JHA further in view PIERSON. Applicants respectfully traverse this rejection.

At the outset, Applicants note that the fact that the Examiner must look to two separate references in an attempt to explain why it would have been obvious to incorporate features missing from claims 1, 3, 5, and 8 of BROMLEY et al. into these claims of BROMLEY et al. is a clear indication of the inappropriateness of this double patenting rejection. Moreover, JAH is not prior art, as indicated above.

While not acquiescing in this rejection, but merely to expedite prosecution, Applicants submit a terminal disclaimer herewith to overcome the non-statutory judicially-created doctrine of obviousness-type double patenting rejection.

For at least the foregoing reasons, Applicants respectfully request the reconsideration and withdrawal of the non-statutory obviousness-type double patenting rejection of claim 52 be withdrawn.

Double patenting rejection based on BROMELY et al., JHA, and SCHMIDT

Claims 54-57 stand rejected on the ground of non-statutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 3, 5 and 8 of BROMLEY et al. in view of JHA further in view SCHMIDT. Applicants respectfully traverse this rejection.

At the outset, Applicants note that the fact that the Examiner must look to two separate references in an attempt to explain why it would have been obvious to incorporate features missing from claims 1, 3, 5, and 8 of BROMLEY et al. into these claims of BROMLEY et al. is a clear indication of the inappropriateness of this double patenting rejection. Moreover, JAH is not prior art, as indicated above.

While not acquiescing in this rejection, but merely to expedite prosecution, Applicants submit a terminal disclaimer herewith to overcome the non-statutory judicially-created doctrine of obviousness-type double patenting rejection.

For at least the foregoing reasons, Applicants respectfully request the reconsideration and withdrawal of the non-statutory obviousness-type double patenting rejection of claims 54-57 be withdrawn.

Double patenting rejection based on BROMELY et al., JHA, and PIERSON

Claim 58 stands rejected on the ground of non-statutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 3, 5 and 8 of BROMLEY et al. in view of JHA further in view PIERSON. Applicants respectfully traverse this rejection.

At the outset, Applicants note that the fact that the Examiner must look to two separate references in an attempt to explain why it would have been obvious to incorporate features missing from claims 1, 3, 5, and 8 of BROMLEY et al. into these claims of BROMLEY et al. is a clear indication of the inappropriateness of this double patenting rejection. Moreover, JAH is not prior art, as indicated above.

While not acquiescing in this rejection, but merely to expedite prosecution, Applicants submit a terminal disclaimer herewith to overcome the non-statutory judicially-created doctrine of obviousness-type double patenting rejection.

For at least the foregoing reasons, Applicants respectfully request the reconsideration and withdrawal of the non-statutory obviousness-type double patenting rejection of claim 58 be withdrawn.

Double patenting rejection based on BROMELY et al., JHA, and SCHMIDT

Claims 60-63 stand rejected on the ground of non-statutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 3, 5 and 8 of BROMLEY et al. in view of JHA further in view SCHMIDT. Applicants respectfully traverse this rejection.

At the outset, Applicants note that the fact that the Examiner must look to two separate references in an attempt to explain why it would have been obvious to incorporate features missing from claims 1, 3, 5, and 8 of BROMLEY et al. into these claims of BROMLEY et al. is a clear indication of the inappropriateness of this double patenting rejection. Moreover, JAH is not prior art, as indicated above.

While not acquiescing in this rejection, but merely to expedite prosecution, Applicants submit a terminal disclaimer herewith to overcome the non-statutory judicially-created doctrine of obviousness-type double patenting rejection.

For at least the foregoing reasons, Applicants respectfully request the reconsideration and withdrawal of the non-statutory obviousness-type double patenting rejection of claims 60-63 be withdrawn.

Double patenting rejection based on BROMELY et al., JHA, and PIERSON

Claim 64 stands rejected on the ground of non-statutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 3, 5 and 8 of BROMLEY et al. in view of JHA further in view PIERSON. Applicants respectfully traverse this rejection.

At the outset, Applicants note that the fact that the Examiner must look to two separate references in an attempt to explain why it would have been obvious to incorporate features missing from claims 1, 3, 5, and 8 of BROMLEY et al. into these claims of BROMLEY et al. is a clear indication of the inappropriateness of this double patenting rejection. Moreover, JAH is not prior art, as indicated above.

While not acquiescing in this rejection, but merely to expedite prosecution, Applicants submit a terminal disclaimer herewith to overcome the non-statutory judicially-created doctrine of obviousness-type double patenting rejection.

For at least the foregoing reasons, Applicants respectfully request the reconsideration and withdrawal of the non-statutory obviousness-type double patenting rejection of claim 64 be withdrawn.

Double patenting rejection based on BROMELY et al., JHA, and KREMER

Claim 66 stands rejected on the ground of non-statutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 3, 5 and 8 of BROMLEY et al. in view of JHA further in view KREMER. Applicants respectfully traverse this rejection.

At the outset, Applicants note that the fact that the Examiner must look to two separate references in an attempt to explain why it would have been obvious to incorporate features missing from claims 1, 3, 5, and 8 of BROMLEY et al. into these claims of BROMLEY et al. is a clear indication of the inappropriateness of this double patenting rejection. Moreover, JAH is not prior art, as indicated above.

While not acquiescing in this rejection, but merely to expedite prosecution, Applicants submit a terminal disclaimer herewith to overcome the non-statutory judicially-created doctrine of obviousness-type double patenting rejection.

For at least the foregoing reasons, Applicants respectfully request the reconsideration and withdrawal of the non-statutory obviousness-type double patenting rejection of claim 66 be withdrawn.

Double patenting rejection based on BROMELY et al., JHA, and SCHMIDT

Claims 67-69 stand rejected on the ground of non-statutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 3, 5 and 8 of BROMLEY et al. in view of JHA further in view SCHMIDT. Applicants respectfully traverse this rejection.

At the outset, Applicants note that the fact that the Examiner must look to two separate references in an attempt to explain why it would have been obvious to incorporate features missing from claims 1, 3, 5, and 8 of BROMLEY et al. into these claims of BROMLEY et al. is a clear indication of the inappropriateness of this double patenting rejection. Moreover, JAH is not prior art, as indicated above.

While not acquiescing in this rejection, but merely to expedite prosecution, Applicants submit a terminal disclaimer herewith to overcome the non-statutory judicially-created doctrine of obviousness-type double patenting rejection.

For at least the foregoing reasons, Applicants respectfully request the reconsideration and withdrawal of the non-statutory obviousness-type double patenting rejection of claims 67-69 be withdrawn.

Conclusion

In view of the foregoing amendment and remarks, Applicants respectfully request the Examiner's reconsideration of this application, and the timely allowance of the pending claims.

As Applicants' remarks with respect to the Examiner's rejections are sufficient to overcome these rejections, Applicants' silence as to assertions by the Examiner in the Office

Action or certain requirements that may be applicable to such assertions (e.g., whether a reference constitutes prior art, reasons to modify a reference and/or combine references, assertions as to dependent claims, etc.) is not a concession by Applicants that such assertions are accurate or such requirements have been met, and Applicants reserve the right to analyze and dispute such assertions/requirements in the future.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

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Respectfully submitted,

HARRITY & HARRITY, LLP

By: /James S. Bennin, Reg. No. 60692/

James S. Bennin

Registration No. 60,692
</div>

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11350 Random Hills Road

Suite 600

Fairfax, Virginia 22030

(571) 432-0800

Customer Number: 44987